

EXHIBIT 2

Declaration and Power of Attorney For Patent Application

Erklärung Für Patentanmeldungen Mit Vollmacht

German Language Declaration

127 226738

Als nachstehend benannter Erfinder erkläre ich hiermit an Eldes Statt:

As a below named inventor, I hereby declare that:

dass mein Wohnsitz, meine Postanschrift, und meine Staatsangehörigkeit den im Nachstehenden nach meinem Namen aufgeführten Angaben entsprechen, dass ich, nach bestem Wissen der ursprüngliche, erste und alleinige Erfinder (falls nachstehend nur ein Name angegeben ist) oder ein ursprünglicher, erster und Miterfinder (falls nachstehend mehrere Namen aufgeführt sind) des Gegenstandes bin, für den dieser Antrag gestellt wird und für den ein Patent für die Erfindung mit dem Titel beantragt wird:

My residence, post office address and citizenship are as stated below next to my name,

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled

Vereinfachtes Verfahren zur IMS
Registrierung bei Notrufen

SIMPLIFIED METHOD FOR IMS
REGISTRATION IN THE EVENT OF
EMERGENCY CALLS

deren Beschreibung hier beigelegt ist, es sei denn (in diesem Falle Zutreffendes bitte ankreuzen), diese Erfindung

the specification of which is attached hereto unless the following box is checked:

☒ wurde angemeldet am 13.04.2007 unter der US-Anmeldenummer oder unter der Internationalen Anmeldenummer im Rahmen des PCT-Vertrags PCT/EP2007/053654 und am _____ abgeändert (falls zutreffend).

☒ was filed on 13.04.2007 as United States Application Number or PCT International Application Number PCT/EP2007/053654 and was amended on _____ (if applicable).

Ich bestätige hiermit, dass ich den Inhalt der obigen Patentanmeldung einschliesslich der Ansprüche, die eventuell durch einen Zusatzantrag wie oben erwähnt abgeändert wurde, durchgesehen und verstanden habe.

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.

Ich erkenne meine Pflicht zur Offenbarung jeglicher Informationen an, die zur Prüfung der Patentfähigkeit in Einklang mit Titel 37, Code of Federal Regulations, § 1.56 von Belang sind.

I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, § 1.56.

Ich beanspruche hiermit ausländische Prioritätsvorteile gemäß Title 35, United States Code, § US-Code, § 119 (a)-(d), bzw. § 365(b) aller unten aufgeführten Auslandsanmeldungen für Patente oder Erfinderurkunden, oder § 365(a) aller PCT internationalen Anmeldungen, welche wenigstens ein Land ausser den Vereinigten Staaten von Amerika benennen, und habe nachstehend durch ankreuzen sämtliche Auslandsanmeldungen für Patente bzw. Erfinderurkunden oder PCT internationale Anmeldungen angegeben, deren Anmeldetag dem der Anmeldung, für welche Priorität beansprucht wird, vorangeht.

I hereby claim foreign priority under Title 35, 119(a)-(d) or § 365(b) of any foreign application(s) for patent or inventor's certificate, or § 365(a) of any PCT International application which designated at least one country other than the United States, listed below and have also identified below, by checking the box, any foreign application for patent or inventor's certificate, or PCT International application having a filing date before that of the application on which priority is claimed.

IDNR: 2590 / 28.11.2005

German Language Declaration

Prior foreign applications

Priorität beansprucht

Priority Claimed

10 2006 019 719.4DE27.04.2006☒☐(Number)
(Nummer)(Country)
(Land)(Day Month Year Filed)
(Tag Monat Jahr eingereicht)Yes
JaNo
Nein(Number)
(Nummer)(Country)
(Land)(Day Month Year Filed)
(Tag Monat Jahr eingereicht)☐
Yes
Ja☐
No
Nein(Number)
(Nummer)(Country)
(Land)(Day Month Year Filed)
(Tag Monat Jahr eingereicht)☐
Yes
Ja☐
No
Nein(Number)
(Nummer)(Country)
(Land)(Day Month Year Filed)
(Tag Monat Jahr eingereicht)☐
Yes
Ja☐
No
Nein

Ich beanspruche hiermit die mir unter Title 35, US-Code, § 120 zustehenden Vorteile aller unten aufgeführten US-Patentanmeldungen bzw. § 365(c) aller PCT internationalen Anmeldungen, welche die Vereinigten Staaten von Amerika benennen, und erkenne, insofern der Gegenstand eines jeden früheren Anspruchs dieser Patentanmeldung nicht in einer US-Patentanmeldung, bzw. PCT internationalen Anmeldung in einer gemäß dem ersten Absatz von Title 35, US-Code, § 112 vorgeschriebenen Art und Weise offenbart wurde, meine Pflicht zur Offenbarung jeglicher Informationen an, die zur Prüfung der Patentfähigkeit in Einklang mit Title 37, Code of Federal Regulations, § 1.56 von Belang sind und die im Zeitraum zwischen dem Anmeldetag der früheren Patentanmeldung und dem nationalen oder im Rahmen des Vertrags über die Zusammenarbeit auf dem Gebiet des Patentwesens (PCT) gültigen internationalen Anmeldetags bekannt geworden sind.

I hereby claim the benefit under Title 35, United States Code, § 120 of any United States application(s), or § 365(c) of any PCT international application designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT international application in the manner provided by the first paragraph of Title 35, United States Code, § 112, I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, § 1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application.

PCT/EP2007/05365413.04.2007anhängigpending(Application Serial No.)
(Anmeldeseriennummer)(Filing Date D, M, Y)
(Anmeldedatum T, M, J)(Status)
(patentiert, anhängig,
aufgegeben)(Status)
(patented, pending,
abandoned)(Application Serial No.)
(Anmeldeseriennummer)(Filing Date D,M,Y)
(Anmeldedatum T, M; J)(Status)
(patentiert, anhängig,
aufgeben)(Status)
(patented, pending,
abandoned)

Ich erkläre hiermit, daß alle in der vorliegenden Erklärung von mir gemachten Angaben nach bestem Wissen und Gewissen der Wahrheit entsprechen, und ferner daß ich diese eidesstattliche Erklärung in Kenntnis dessen ablege, daß wissentlich und vorsätzlich falsche Angaben oder dergleichen gemäß § 1001, Title 18 des US-Code strafbar sind und mit Geldstrafe und/oder Gefängnis bestraft werden können und daß derartige wissentlich und vorsätzlich falsche Angaben die Rechtswirksamkeit der vorliegenden Patentanmeldung oder eines aufgrund deren erteilten Patentes gefährden können.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Page 2

German Language Declaration

VERTRETUNGSVOLLMACHT: Als benannter Erfinder beauftrage ich hiermit den (die) nachstehend aufgeführten Patentanwalt (Patentanwälte) und/oder Vertreter mit der Verfolgung der vorliegenden Patentanmeldung sowie mit der Abwicklung aller damit verbundenen Angelegenheiten vor dem US-Patent- und Markenamt: (Name(n) und Registrationsnummer(n) auflisten)

POWER OF ATTORNEY: As a named inventor, I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith: (list name and registration number)

Customer No.

And I hereby appoint

Telefongespräche bitte richten an:
(Name und Telefonnummer)

Direct Telephone Calls to: (name and telephone number)

Ext. _____

Postanschrift:

Send Correspondence to:

Squire Sanders & Dempsey LLP
8000 Towers Crescent Drive, 14th Floor Vienna VA 22182-6212 UNITED STATES OF AMERICA
Telephone: +170 3720 7800 and Facsimile +170 3720 7801
or
Customer No.

Voller Name des einzigen oder ursprünglichen Erfinders:		Full name of sole or first inventor:	
Rainer Liebhart		Rainer Liebhart	
Unterschrift des Erfinders	Datum	Inventor's signature	Date
	77.10.08		77.10.08
Wohnsitz		Residence	
München, GERMANY		München, GERMANY	
Staatsangehörigkeit		Citizenship	
DE		DE	
Postanschrift		Post Office Address	
Baslerstr. 68		Baslerstr. 68	
81476 München		81476 München	
GERMANY		GERMANY	
Voller Name des zweiten Miterfinders (falls zutreffend):		Full name of second joint inventor, if any:	
Unterschrift des Erfinders		Inventor's signature	
Datum		Date	
Wohnsitz		Residence	
Staatsangehörigkeit		Citizenship	
Postanschrift		Post Office Address	

(Bitte entsprechende Informationen und Unterschriften im Falle von dritten und weiteren Miterfindern angeben).

(Supply similar information and signature for third and subsequent joint inventors).

IA16 Rec'd PCT/PTO 27 OCT 2008
12/226738

PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of:

Rainer LIEBHART

International Appln. No.: PCT/EP2007/053654

Filed: Concurrently herewith

Attorney Dkt. No.: 102202.00006

For: SIMPLIFIED METHOD FOR IMS REGISTRATION IN THE VENT OF
EMERGENCY CALLS

PRELIMINARY AMENDMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

October 27, 2008

Sir:

Prior to calculation of the filing fees and initial examination of the application,
please amend the above-identified application as set forth below.

**Amendments to the abstract of the disclosure are submitted beginning on
page 2.**

Amendments to the claims are submitted beginning on page 3.

Remarks are submitted beginning on page 10.

IN THE ABSTRACT:

Please add the abstract of the disclosure to read as follows:

Simplification of IMS registration in the event of emergency calls is made possible by apparatuses and a method for setting up an emergency-call connection from a terminal to an IMS via a network visited by the terminal, where, if the terminal is already registered in the IMS, setup of an emergency-call connection dispenses with IMS registration of the terminal in the IMS for this emergency-call connection if a comparison between a network identification for the visited network, of which the terminal was notified when it registered in the visited network, and a network identification for the terminal's home network reveals a match between these network identifications.

IN THE CLAIMS:

Please cancel claims 1-11; and

Please add new claims 12-32 as follows.

1-11. (Cancelled)

12. (New) A method for setting up an emergency call connection from a terminal to an IP Multimedia Subsystem (IMS) via a network visited by the terminal, wherein, if the terminal is already registered in the IP Multimedia Subsystem (IMS), an IP Multimedia Subsystem (IMS) registration of the terminal in the IMS for the emergency call connection is dispensed with during the setting-up of the emergency call connection, if a comparison between a network identifier for the visited network, about which the terminal was notified when it registered in the visited network, and a network identifier of the home network of the terminal reveals a match between these network identifiers.

13. (New) The method as claimed in claim 12, characterized in that a match of these network identifiers specifies that the terminal and/or a mobile radio subscriber identity module located therein is located in its home network.

14. (New) The method as claimed in claim 12, characterized in that, if the comparison reveals a match of the network identifiers, the terminal transmits the emergency call via an IMS registration which already exists.

15. (New) The method as claimed in claim 12, characterized in that the comparison is made in the terminal.

16. (New) The method as claimed in claim 12, characterized in that the network identifier comprises at least one of a Mobile Country Code (MCC) and a Mobile Network Code (MNC).

17. (New) The method as claimed in claim 12, characterized in that the network is one of a cellular mobile radio network, a Wireless Local Area Network (WLAN), a WIMAX network and a fixed network.

18. (New) The method as claimed in claim 12, characterized in that the network identifier of the visited mobile radio network is conveyed to the terminal during the authentication of the terminal to the visited mobile radio network.

19. (New) The method as claimed in claim 12, characterized in that a Proxy Call State Control Function (P-CSCF) of a mobile radio network sends the network identifier of the network, in which the Proxy Call State Control Function (P-CSCF) is located itself, to the terminal in a response to an IP Multimedia Subsystem (IMS) registration request of the terminal,

whereupon the terminal, when it recognizes that the visited network is not the home network, determines by means of a network identifier obtained from the Proxy Call State

Control Function (P-CSCF) during the registration, whether the Proxy Call State Control Function (P-CSCF) is also located in the mobile radio network visited by the terminal, in which case, when the emergency call connection is set up, a special IP Multimedia Subsystem (IMS) registration of the terminal in the IP Multimedia Subsystem (IMS) is dispensed with for the emergency call connection and the terminal sets up a Session Initiation Protocol (SIP) session for the emergency call connection, whereas otherwise, when the emergency call connection is set up, the special IP Multimedia Subsystem (IMS) registration of the terminal in the IP Multimedia Subsystem (IMS) is first effected for the emergency call connection before the Session Initiation Protocol (SIP) session is set up for the emergency call connection.

20. (New) The method as claimed in claim 12, characterized in that for the emergency call connection, the Session Initiation Protocol (SIP) session is set up by an "SIP INVITE" message.

21. (New) The method as claimed in claim 12, characterized in that, if the Proxy Call State Control Function (P-CSCF) is not capable of dealing with emergency calls, the Proxy Call State Control Function (P-CSCF) sends back related information to the terminal in a response to a registration request by this terminal, and the terminal then takes this information into consideration in the decision whether it must perform a special emergency call registration or not.

22. (New) The method as claimed in claim 12, characterized in that if the network comprises one of a General Packet Radio Service (GPRS) and a Universal Mobile Telecommunications System (UMTS) access system, setting-up of a separate PDP context can be dispensed together with the IMS registration of the terminal in the IMS for the emergency call connection.

23. (New) A terminal for setting-up an emergency call connection from the terminal to an IP Multimedia Subsystem via a network visited by the terminal, comprising:

a means for receiving a network identifier of the visited network notified to the terminal during the registration of the terminal in the visited network,

a means for comparing the received network identifier of the visited network with a network identifier of a home network of the terminal,

a means for setting-up the emergency call connection wherein an IP Multimedia Subsystem (IMS) registration of the terminal in the IMS for the emergency call connection is dispensed with, if the terminal is already registered in the IP Multimedia Subsystem (IMS) and if the comparison means reveals a match between the network identifiers.

24. (New) A terminal according to claim 12 where the emergency connection is set-up over an already existing IP Multimedia Subsystem registration if the comparison means reveals a match between the network identifiers.

25. (New) A terminal according to claim 12 where the network identifier of the visited network is received during an authentication of the terminal with the visited network.

26. (New) A terminal according to any of claims 12 comprising:
a Subscriber Identity Module (SIM) / Universal Subscriber Identity Module (USIM) card storing the identifier of the home network of the device.

27. (New) A terminal according to claim 12 where the network identifier comprises at least one of a Mobile Country Code (MCC) and a Mobile Network Code (MNC).

28. (New) A terminal according to claim 12 where the visited network from which the network identifier is received from is one of a cellular network, a wireless local area network, a WIMAX network and a fixed network.

29. (New) A terminal according to claim 12 where the network identifier is received from a Proxy Call State Control Function (P-CSCF) of a mobile radio network in a response to an IP Multimedia Subsystem registration request of the terminal identifying the network in which the Proxy Call State Control Function (P-CSCF) is located itself comprising:

a determining means determining, when the visited network is not the home network, by means of the network identifier obtained from the Proxy Call State Control Function (P-CSCF) during the registration whether the Proxy Call State Control Function (P-CSCF) is also located in the mobile radio network visited by the terminal, in which case, when the emergency call connection is set-up, a special IP Multimedia Subsystem (IMS) registration of the terminal in the IP Multimedia Subsystem (IMS) is dispensed with for the emergency call connection and the terminal sets up a Session Initiation Protocol (SIP) session for the emergency call connection,

whereas otherwise, when the emergency call connection is set-up, the special IP Multimedia Subsystem (IMS) registration of the terminal in the IP Multimedia Subsystem (IMS) is first effected for the emergency call connection before the Session Initiation Porotocl (SIP) session is set up for the emergency call connection.

30. (New) A terminal according to claims 18 where the Session Initiation Protocol (SIP) session for the emergency session is set up by an "SIP INVITE" message.

31. (New) A terminal according to claim 18 comprising:

a decision means deciding if a special emergency call registration is needed or not, after receiving information from the Proxy Call State Control Function (P-CSCF) that the Proxy Call State Control Function (P-CSCF) is not able to handle the emergency call.

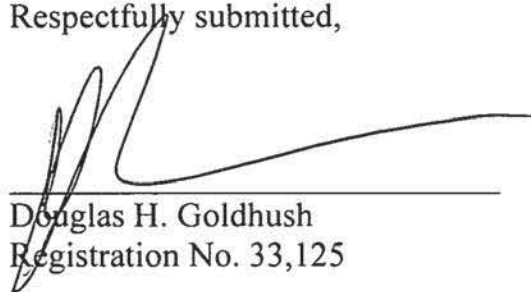
32. (New) A terminal according to claim 12 where the network comprises one of a General Packet Radio Service (GPRS) and a Universal Mobile Telecommunications System (UMTS) access system and where setting-up of a separate PDP context can be dispensed with together with the IMS registration of the terminal in the IMS for the emergency call connection.

REMARKS

Claims 12-32 are pending in this application. By this Amendment, the abstract of the disclosure has been added; claims 1-11 have been cancelled without prejudice or disclaimer; and new claims 12-32 are added to place this application into better condition for examination. No new matter has been added.

In the event that there are any fees due with respect to the filing of this paper, please charge Counsel's Deposit Account No.50-2222.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Douglas H. Goldhush', is written over a horizontal line. The signature is stylized with a large, sweeping 'D' and 'G'.

Douglas H. Goldhush
Registration No. 33,125

Customer Number 32294
SQUIRE, SANDERS & DEMPSEY LLP
14TH Floor
8000 Towers Crescent Drive
Vienna, Virginia 22182-6212
Telephone: 703-720-7800
Fax: 703-720-7802

DHG:kh

¹ 1AP16 Rec'd PCT/PTO 27 OCT 2008
12/226738

Description

5 Simplified method for IMS registration in the event of emergency calls

The invention relates to methods and devices for IMS registration in the event of emergency calls.

10 Networks such as, e.g. cellular mobile radio networks, are known per se to the expert from, e.g. specifications in www.etsi.org or www.3gpp.org.

15 TS 23.167 Release 7 of the 3GPP Standardization Organization specifies emergency calls in the IMS (IP Multimedia Subsystem).

This 3GPP Technical Specification TS 23.167 also relates to Next Generation Fixed Networks as standardized, e.g. in ETSI TISPAN and CableLabs. An important basic principle for IMS emergency calls is the special "IMS emergency call registration". TS 23.167 is currently based on the fact that a terminal which wishes to transmit an emergency call in the IMS first registers in the IMS by means of an emergency call SIP URI (also called emergency call Public User Identity).
20 This SIP URI (Session Initiation Protocol Uniform Resource Identifier) is either preconfigured in the terminal or the terminal generates it from an existing SIP URI which is stored, e.g. on the UICC (Universal Integrated Circuit Card), if present. In the case of GPRS/UMTS, the registration in the
30 IMS is preceded by the setting-up of an emergency PDP (Packet Data Protocol) context. A PDP context sets up a session between the terminal and a GGSN and allocates an IP and a P-CSCF address to the terminal. This PDP context uses its own APN (Access Point Name), with the aid of which a GGSN and a
35 P-CSCF (Proxy Call Session Control Function) are determined in the visited mobile radio network (VPLMN). This is necessary, since the emergency call must be routed in the VPLMN

to the emergency call center, but in the case of roaming, the GGSN, and thus also the P-CSCF, may well be located in the home network of the subscriber (and usually are since the APNs are preconfigured in the terminal by the home network operator). However, this procedure has the disadvantage that the setting-up of a PDP context and the subsequent IMS registration can consume a great amount of time (easily within the range of seconds). For this reason, the 3GPP is currently considering how the special IMS registration can be dispensed with in the case of emergency calls if the terminal is already registered in the IMS. The situation is made more difficult by the fact that a terminal can register in a foreign network but P-CSCF and GGSN can still be located in the home network (so-called GPRS roaming, in contrast to IMS roaming, where P-CSCF and GGSN are both in the visited network). The invention describes possible methods of how a special IMS registration can be dispensed with in the case of emergency calls in order to thus significantly accelerate the setting up of the call. In the case of GPRS/UMTS networks, this also makes it possible to dispense with the setting up of an emergency call PDP context.

The current TS 23.167 Standard specifies that the terminal must always perform a registration in the IMS by means of the special emergency SIP URI.

In the case of GPRS/UMTS, this IMS registration is preceded by the setting-up of a special PDP context in the visited network by means of the special emergency APN.

The object of the invention is simplification of the setting-up of an emergency call connection.

The object is achieved in each case by the subject matters of the patent claims.

The invention describes methods of how the special IMS emergency call registration, and in the case of GPRS/UMTS, the setting-up of a special PDP context, can be dispensed with. In this context, it is assumed that the terminal has
5 locally stored an identifier (network identifier) which identifies its home network (e.g. that of its mobile radio subscriber identification card). In mobile networks, this identifier is stored as MCC/MNC (Mobile Country Code/Mobile Network Code) of the home network on the SIM/USIM card.

10 If the terminal, when registering in the visited network, is informed by the latter about the network identifier of the visited network (in the case of GPRS/UMTS, this information is broadcasted, e.g. by the radio network, in 3GPP WLAN, this
15 information is transmitted to the terminal during the access authentication, in Next Generation Fixed Networks, a similar method could be used as in the case of 3GPP WLAN), it can dispense with the special IMS registration for emergency calls if the terminal is already registered in the IMS and
20 the comparison between the stored identifier of the home network and the received identifier of the visited network has revealed that both networks are identical, that is to say the terminal is not moving in a foreign network. Since the subscribers are predominantly located in their home network
25 and the terminal must always be registered in the IMS in order to be "always on", and thus reachable, this method dispenses in most cases with a special IMS registration for emergency calls with the associated setting-up of a PDP context in the case of GPRS/UMTS.

30 According to one embodiment of the general method, the invention proposes that the P-CSCF sends the identifier of the network, in which it is located itself, to the terminal in the response to the registration request of the terminal
35 (SIP 200 OK as response to the SIP REGISTER message). If, as previously described, the terminal determines that it is located in a visited network and not in the home network, it can determine, by means of the information which it has obtained from the P-CSCF during the registration, whether the

P-CSCF is also located in the visited network. If this is the case, a special IMS registration for emergency calls is no longer necessary. In the case of emergency calls, the terminal can immediately set up the SIP session by means of an SIP INVITE message. In all other cases, emergency call registration is required. This alternative method also covers the scenarios in which the method described before is applicable, but is more generally applicable.

10 If not every P-CSCF is capable of dealing with emergency calls, the P-CSCF can send back related information also in the response to the registration request from this terminal. The terminal must then take this information into consideration in the decision whether it must perform a special emergency call registration or not.

The invention describes methods by means of which a special IMS registration for emergency calls, and in the case of GPRS/UMTS access systems, the setting-up of a separate PDP context, can be dispensed with in most cases. Since setting-up of a PDP context and IMS registration are time-consuming procedures, this results in considerable time saving which is a significant requirement particularly in the case of emergency calls.

25 In particular, the invention can be used in cellular mobile radio networks but also in WLAN/WIMAX networks and fixed networks.

30 Further features and advantages of the invention are obtained from the further patent claims and the subsequent description of an exemplary embodiment by means of the drawing. The exemplary embodiment shows in figure 1 a flowchart which represents how a terminal, after successful IMS registration, can transmit an emergency call via a mobile radio access network without first having to perform a special emergency call registration in the IMS.

Figure 1 shows some components "S-CSCF", "P-CSCF", "GGSN", "SGSN", "Radio Access Network" of a mobile radio network known per se to the expert from, e.g. specifications in www.etsi.org or www.3gpp.org.

5

A terminal (fig. 1, "terminal") registers in a mobile radio network and obtains a network identifier ("MCC1/MNC1") of the mobile radio network visited by it.

- 10 The terminal then sets up a PDP context to a GGSN of the mobile radio network and is assigned an IP address and a P-CSCF address for the communication with the P-CSCF.

- 15 Following this, the terminal registers with the P-CSCF in the IMS (with a "SIP REGISTER" message). From the P-CSCF, the terminal obtains the network identifier "MCC2/MNC2" of the network in which this P-CSCF is located (with a "SIP 200 OK" message).

- 20 If the terminal should transmit an emergency call later, this is possible, e.g. in the following way:
a comparison of the network identifier "MCC1/MNC1" (stored in the terminal after its registration/authentication etc. in the mobile radio network visited by it) of the network
25 visited by the terminal with the network identifier "MCC2/MNC2" of the network in which the P-CSCF is located, reveals that the P-CSCF is located in the network visited by the terminal.

- 30 For this reason, the terminal does not perform a special (separate/further) registration for the emergency call desired by it but immediately sets up the emergency call by means of a "SIP INVITE" message. This saves time.

Patent claims

1. A method for setting up an emergency call connection from a terminal (fig. 1: "terminal") to an IMS via a network (fig. 1: "S-CSCF", "P-CSCF", "GGSN", "SGSN", Radio Access Network"...) visited by the terminal, wherein, if the terminal is already registered in the IMS, an IMS registration of the terminal in the IMS for this emergency call connection is dispensed with during the setting-up of an emergency call connection, if a comparison between a network identifier (fig. 1: "MCC1"/"MNC1") for the visited network, of which the terminal was notified when it registered in the visited network, and a network identifier of the home network of the terminal reveals a match between these network identifiers.
2. The method as claimed in claim 1, characterized in that a match of these network identifiers specifies that the terminal and/or mobile radio subscriber identity module located therein is located in its home network.
3. The method as claimed in claim 1, characterized in that, if the comparison reveals a match of the network identifiers, the terminal transmits the emergency call via an IMS registration which already exists.
4. The method as claimed in claim 1, characterized in that the comparison is made in the terminal.
5. The method as claimed in one of the preceding claims, characterized in that the network is a cellular mobile radio network or a WLAN/WIMAX network.
6. The method as claimed in one of the preceding claims, characterized in that the network is a fixed network.
7. The method as claimed in one of the preceding claims, characterized in that the network identifier of the visited mobile radio network is conveyed to the terminal during the

authentication of the terminal to the visited mobile radio network.

8. The method as claimed in one of the preceding claims, characterized in that a P-CSCF of a mobile radio network sends the network identifier (fig. 1: "MCC1"/"MNC1") of the network, in which it (P-CSCF) is located itself, to the terminal in a response ("SIP 200 OK") to an IMS registration request ("SIP REGISTER") of the terminal, whereupon the terminal, when it finds that the network visited by it is not the home network, determines by means of a network identifier (fig. 1: "MCC2"/"MNC2") obtained from the P-CSCF during the registration, whether the P-CSCF is also located in the mobile radio network visited by the terminal, in which case, when an emergency call connection is set up, a special IMS registration of the terminal in the IMS is dispensed with for this emergency call connection and the terminal sets up an SIP session (fig. 1: SIP INVITE) for the emergency call connection, whereas otherwise, when an emergency call connection is set up, a special IMS registration of the terminal in the IMS is first effected for this emergency call connection before an SIP session (fig. 1: SIP INVITE) is set up for the emergency call connection.

9. The method as claimed in the preceding claim, characterized in that for the emergency call connection, an SIP session is set up by means of an "SIP INVITE" message.

10. The method as claimed in one of the preceding claims, characterized in that, if the P-CSCF is not capable of dealing with emergency calls, the P-CSCF sends back relevant information to the terminal in a response to a registration request by this terminal, and the terminal then takes this information into consideration in the decision whether it must perform a special emergency call registration or not.

11. A device for carrying out the method as claimed in one of the preceding c

PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of:	Confirmation No.: 8511
Rainer LIEBHART	Art Unit: 2617
Application No.: 12/226,738	Examiner: Anthony S. Addy
Filed: October 27, 2008	Attorney Dkt. No.: 102202.00006
For: SIMPLIFIED METHOD FOR IMS REGISTRATION IN THE EVENT OF EMERGENCY CALLS	

RESPONSE UNDER 37 CFR § 1.116

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

February 7, 2012

Sir:

In response to the Office Action dated December 7, 2011, please amend the above-identified application as set forth below

Amendments to the specification are submitted beginning on page 2.

Remarks are submitted beginning on page 3.

IN THE SPECIFICATION:

Please amend the specification to include section headings as shown in the enclosed substitute specification.

REMARKS

The Office Action dated December 7, 2011 has been received and carefully noted. The above amendments to the specification, and the following remarks, are submitted as a full and complete response thereto.

The specification has been amended to include section headings, as shown in the enclosed substitute specification. No new matter has been added. A verified translation of priority application DE 102006019719 is also attached hereto.

Claims 12-23 and 33-41 are currently pending in the application and are respectfully submitted for consideration in view of the following remarks.

The Office Action objected to the specification because it does not include section headings as provided by 37 CFR 1.77(b). As noted above, a substitute specification is submitted herewith which includes section headings as provided by 37 CFR 1.77(b). Accordingly, Applicants submit that the objection to the specification is moot and should be withdrawn.

Claims 12-18, 20-23, and 33-39 were rejected under 35 U.S.C. §103(a) as being unpatentable over Poikselka (U.S. Patent No. 7,606,556), in view of Zinn (U.S. Patent No. 7,274,933), and further in view of Madour (U.S. Publication No. 2008/0089486). Applicants respectfully request that this rejection be withdrawn because it depends on an improper prior art reference, as will be discussed below.

In particular, Applicants submit that Madour does not constitute a proper prior art reference with respect to the present application. Madour has an effective filing date

which is later than the earliest effective filing date of the present application. In particular, Madour has an earliest filing date of October 17, 2006 based on the filing date of provisional appl. no. 60/852,010. The present application, however, has an effective filing date of April 27, 2006 based on the priority to German appl. no. DE 102006019719. Applicants perfect priority to DE 102006019719, filed on April 27, 2006, by submitting the enclosed verified translation of the priority application. Accordingly, Applicants submit that the present application has an effective filing date which is earlier than Madour.

Since the rejection under 35 U.S.C. §103(a) depends on Madour, which is not a valid prior art reference, Applicants respectfully submit that the rejection is improper and should be withdrawn.

Claims 19 and 40-41 were objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. For at least the reasons noted above, Applicants submit that claims 19 and 40-41 should be allowed in their current form.

In view of the above, Applicants submit that all of the objections and rejections raised in the Office Action have been addressed and overcome. Applicants therefore respectfully request that each of claims 12-23 and 33-41 be found allowable and this application passed to issue.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, the applicants' undersigned representative at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, the applicants respectfully petition for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,

/Majid S. AlBassam/

Majid S. AlBassam
Registration No. 54,749

Customer No. 11051
SQUIRE, SANDERS & DEMPSEY (US) LLP
14TH Floor
8000 Towers Crescent Drive
Vienna, Virginia 22182-6212
Telephone: 703-720-7800
Fax: 703-720-7802

Enclosure: Substitute Specification
Verified Translation of German Appl. DE 102006019719

~~Description~~

TITLE:

5 Simplified method for IMS registration in the event of
emergency calls

FIELD:

10 The invention relates to methods and devices for IMS
registration in the event of emergency calls.

BACKGROUND:

15 Networks such as, e.g. cellular mobile radio networks, are
known per se to the expert from, e.g. specifications in
www.etsi.org or www.3gpp.org.

20 TS 23.167 Release 7 of the 3GPP Standardization Organization
specifies emergency calls in the IMS (IP Multimedia
Subsystem).

This 3GPP Technical Specification TS 23.167 also relates to
25 Next Generation Fixed Networks as standardized, e.g. in ETSI
TISPAN and CableLabs. An important basic principle for IMS
emergency calls is the special "IMS emergency call
registration". TS 23.167 is currently based on the fact that
a terminal which wishes to transmit an emergency call in the
30 IMS first registers in the IMS by means of an emergency call
SIP URI (also called emergency call Public User Identity).
This SIP URI (Session Initiation Protocol Uniform Resource
Identifier) is either preconfigured in the terminal or the
terminal generates it from an existing SIP URI which is
35 stored, e.g. on the UICC (Universal Integrated Circuit Card),
if present. In the case of GPRS/UMTS, the registration in the
IMS is preceded by the setting-up of an emergency PDP (Packet
Data Protocol) context. A PDP context sets up a session
between the terminal and a GGSN and allocates an IP and a P-
CSCF address to the terminal. This PDP context uses its own
APN (Access Point Name), with the aid of which a GGSN and a
P-CSCF (Proxy Call Session Control Function) are determined
in the visited mobile radio network (VPLMN). This is
necessary, since the emergency call must be routed in the

VPLMN to the emergency call center, but in the case of roaming, the GGSN, and thus also the P-CSCF, may well be located in the home network of the subscriber (and usually are since the APNs are preconfigured in the terminal by the home network operator). However, this procedure has the disadvantage that the setting-up of a PDP context and the subsequent IMS registration can consume a great amount of time (easily within the range of seconds). For this reason, the 3GPP is currently considering how the special IMS registration can be dispensed with in the case of emergency calls if the terminal is already registered in the IMS. The situation is made more difficult by the fact that a terminal can register in a foreign network but P-CSCF and GGSN can still be located in the home network (so-called GPRS roaming, in contrast to IMS roaming, where P-CSCF and GGSN are both in the visited network).

SUMMARY:

The invention describes possible methods of how a special IMS registration can be dispensed with in the case of emergency calls in order to thus significantly accelerate the setting up of the call. In the case of GPRS/UMTS networks, this also makes it possible to dispense with the setting up of an emergency call PDP context.

The current TS 23.167 Standard specifies that the terminal must always perform a registration in the IMS by means of the special emergency SIP URI.

In the case of GPRS/UMTS, this IMS registration is preceded by the setting-up of a special PDP context in the visited network by means of the special emergency APN.

The object of the invention is simplification of the setting-up of an emergency call connection.

The object is achieved in each case by the subject matters of the patent claims.

DETAILED DESCRIPTION:

The invention describes methods of how the special IMS emergency call registration, and in the case of GPRS/UMTS, the setting-up of a special PDP context, can be dispensed
5 with. In this context, it is assumed that the terminal has locally stored an identifier (network identifier) which identifies its home network (e.g. that of its mobile radio subscriber identification card). In mobile networks, this identifier is stored as MCC/MNC (Mobile Country Code/Mobile
10 Network Code) of the home network on the SIM/USIM card.

If the terminal, when registering in the visited network, is informed by the latter about the network identifier of the visited network (in the case of GPRS/UMTS, this information
15 is broadcasted, e.g. by the radio network, in 3GPP WLAN, this information is transmitted to the terminal during the access authentication, in Next Generation Fixed Networks, a similar method could be used as in the case of 3GPP WLAN), it can dispense with the special IMS registration for emergency
20 calls if the terminal is already registered in the IMS and the comparison between the stored identifier of the home network and the received identifier of the visited network has revealed that both networks are identical, that is to say the terminal is not moving in a foreign network. Since the
25 subscribers are predominantly located in their home network and the terminal must always be registered in the IMS in order to be "always on", and thus reachable, this method dispenses in most cases with a special IMS registration for emergency calls with the associated setting-up of a PDP
30 context in the case of GPRS/UMTS.

According to one embodiment of the general method, the invention proposes that the P-CSCF sends the identifier of the network, in which it is located itself, to the terminal
35 in the response to the registration request of the terminal (SIP 200 OK as response to the SIP REGISTER message). If, as previously described, the terminal determines that it is located in a visited network and not in the home network, it can determine, by means of the information which it has

obtained from the P-CSCF during the registration, whether the P-CSCF is also located in the visited network. If this is the case, a special IMS registration for emergency calls is no longer necessary. In the case of emergency calls, the terminal can immediately set up the SIP session by means of an SIP INVITE message. In all other cases, emergency call registration is required. This alternative method also covers the scenarios in which the method described before is applicable, but is more generally applicable.

If not every P-CSCF is capable of dealing with emergency calls, the P-CSCF can send back related information also in the response to the registration request from this terminal. The terminal must then take this information into consideration in the decision whether it must perform a special emergency call registration or not.

The invention describes methods by means of which a special IMS registration for emergency calls, and in the case of GPRS/UMTS access systems, the setting-up of a separate PDP context, can be dispensed with in most cases. Since setting-up of a PDP context and IMS registration are time-consuming procedures, this results in considerable time saving which is a significant requirement particularly in the case of emergency calls.

In particular, the invention can be used in cellular mobile radio networks but also in WLAN/WIMAX networks and fixed networks.

Further features and advantages of the invention are obtained from the further patent claims and the subsequent description of an exemplary embodiment by means of the drawing. The exemplary embodiment shows in figure 1 a flowchart which represents how a terminal, after successful IMS registration, can transmit an emergency call via a mobile radio access network without first having to perform a special emergency call registration in the IMS.

Figure 1 shows some components "S-CSCF", "P-CSCF", "GGSN", "SGSN", "Radio Access Network" of a mobile radio network known per se to the expert from, e.g. specifications in www.etsi.org or www.3gpp.org.

5

A terminal (fig. 1, "terminal") registers in a mobile radio network and obtains a network identifier ("MCC1/MNC1") of the mobile radio network visited by it.

10 The terminal then sets up a PDP context to a GGSN of the mobile radio network and is assigned an IP address and a P-CSCF address for the communication with the P-CSCF.

Following this, the terminal registers with the P-CSCF in the
15 IMS (with a "SIP REGISTER" message). From the P-CSCF, the terminal obtains the network identifier "MCC2/MNC2" of the network in which this P-CSCF is located (with a "SIP 200 OK" message).

20 If the terminal should transmit an emergency call later, this is possible, e.g. in the following way:
a comparison of the network identifier "MCC1/MNC1" (stored in the terminal after its registration/authentication etc. in the mobile radio network visited by it) of the network
25 visited by the terminal with the network identifier "MCC2/MNC2" of the network in which the P-CSCF is located, reveals that the P-CSCF is located in the network visited by the terminal.

30 For this reason, the terminal does not perform a special (separate/further) registration for the emergency call desired by it but immediately sets up the emergency call by means of a "SIP INVITE" message. This saves time.

UNITED STATES PATENT AND TRADEMARK OFFICE

I, Charles Edward SITCH BA,

Managing Director of RWS Group Ltd UK Translation Division, of Europa House, Chiltern Park, Chiltern Hill, Chalfont St Peter, Buckinghamshire, United Kingdom, declare;

1. That I am a citizen of the United Kingdom of Great Britain and Northern Ireland.
2. That the translator responsible for the attached translation is well acquainted with the German and English languages.
3. That the attached is, to the best of RWS Group Ltd knowledge and belief, a true translation into the English language of the accompanying copy of the specification filed with the application for a patent in Germany on April 27, 2006 under the number DE 10 2006 019 719.4.
4. That I believe that all statements made herein of my own knowledge are true and that all statements made on information and belief are true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the patent application in the United States of America or any patent issuing thereon.



For and on behalf of RWS Group Ltd

The 31st day of January 2012

FEDERAL REPUBLIC OF GERMANY



**Priority Certificate
DE 10 2006 019 719.4
for the filing of a Patent Application**

File Reference: 10 2006 019 719.4

Filing date: 27 April 2006

Applicant/Proprietor: Siemens Aktiengesellschaft, 80333 Munich/DE

Title: Simplified method for IMS registration in the event of emergency calls

IPC: H 04 Q 7/38, H 04 Q 7/32

The attached documents are a correct and accurate reproduction of the parts of the submission for this Patent Application filed on 27 April 2006 irrespective of any discrepancies in colour caused by the copying process.

Munich, 12 July 2007
German Patent and Trademark Office
The President
pp



[signature]
Hoiß

102006019719.4
2006P08190WOUS

- 1 -

Description

Simplified method for IMS registration in the event of emergency calls

The invention relates to methods and devices for IMS registration in the event of emergency calls.

Networks such as, e.g. cellular mobile radio networks, are known per se to the expert from, e.g. specifications in www.etsi.org or www.3gpp.org.

TS 23.167 Release 7 of the 3GPP Standardization Organization specifies emergency calls in the IMS (IP Multimedia Subsystem). This 3GPP Technical Specification TS 23.167 also relates to Next Generation Fixed Networks as standardized, e.g. in ETSI TISPAN and CableLabs. An essential basic principle in IMS emergency calls is the special "IMS emergency call registration". TS 23.167 is currently based on the fact that a terminal which wishes to transmit an emergency call in the IMS first registers in the IMS by means of its own emergency call SIP URI (also called emergency call Public User Identity). This SIP URI (Session Initiation Protocol Uniform Resource Identifier) is either preconfigured in the terminal or the terminal generates it from an existing SIP URI which is stored, e.g. on the UICC (Universal Integrated Circuit Card), if present. In the case of GPRS/UMTS, the registration in the IMS is preceded by the setting-up of an emergency PDP (Packet Data Protocol) context. A PDP context sets up a session between the terminal and a GGSN and allocates an IP and a P-CSCF address to the terminal. This PDP context uses its own APN (Access Point Name), with the aid of which a GGSN and a P-CSCF (Proxy Call Session Control Function) are determined in the visited mobile radio network (VPLMN). This is necessary, since the emergency call must be routed in the VPLMN to the emergency call center but in the case of roaming, the GGSN, and thus also

102006019719.4
2006P08190WOUS

- 2 -

the P-CSCF, may well be located in the home network of the subscriber (and usually are since the APNs are preconfigured on the terminal by the home network operator). However, this procedure has the disadvantage that the setting-up of a PDP context and the subsequent IMS registration can consume a great amount of time (easily within the range of seconds). For this reason, the 3GPP is currently considering how the special IMS registration can be dispensed with in the case of emergency calls if the terminal is already registered in the IMS. The situation is made more difficult by the fact that a terminal can register in a foreign network but P-CSCF and GGSN can still be located in the home network (so-called GPRS roaming, in contrast to IMS roaming, where P-CSCF and GGSN are both in the visited network). The invention describes possible methods of how a special IMS registration can be dispensed with in the case of emergency calls in order to thus significantly accelerate the setting up of a call. In the case of GPRS/UMTS networks, this also makes it possible to dispense with the setting up of an emergency call PDP context.

The previous TS 23.167 Standard specifies that the terminal must always perform a registration in the IMS by means of the special emergency SIP URI.

In the case of GPRS/UMTS, this IMS registration is preceded by the setting-up of a special PDP context in the visited network by means of the special emergency APN.

The object of the invention is simplification of the setting-up of an emergency call connection.

The object is achieved in each case by the subject matters of the patent claims.

The invention describes methods of how the special IMS emergency call registration, and in the case of GPRS/UMTS, the setting-up of a special PDP context, can be dispensed with. In

102006019719.4
2006P08190WOUS

- 3 -

this context, it is assumed that the terminal has locally stored an identifier (network identifier) which identifies its home network (e.g. that of its mobile radio subscriber identification card). In mobile radio, this identifier is stored as MCC/MNC (Mobile Country Code/Mobile Network Code) of the home network on the SIM/USIM card.

If the terminal, when registering in the visited network, is informed by the latter about the network identifier of the visited network (in the case of GPRS/UMTS, this information is radiated, e.g. by the radio network, in 3GPP WLAN, this information is transmitted to the terminal during the access authentication, in Next Generation Fixed Networks, a similar method could be used as in the case of 3GPP WLAN), it can dispense with the special IMS registration for emergency calls if the terminal is already registered in the IMS and the comparison between the stored identifier of the home network and the received identifier of the visited network has revealed that both networks are identical, that is to say the terminal is not moving in a foreign network. Since the subscribers are predominantly located in their home network and the terminal must always be registered in the IMS in order to be "always on", and thus available, this method dispenses in most cases with a special IMS registration for emergency calls with the associated setting-up of a PDP context in the case of GPRS/UMTS.

According to one embodiment of the general method, the invention proposes that the P-CSCF sends the identifier of the network, in which it is located itself, to the terminal in the response to the registration request of the terminal (SIP 200 OK as response to the SIP REGISTER message). If, as previously described, the terminal determines that it is located in a visited network and not in the home network, it can determine, by means of the information which it has obtained from the P-CSCF during the registration, whether the

102006019719.4
2006P08190WOUS

- 4 -

P-CSCF is also located in the visited network. If this is the case, a special IMS registration for emergency calls is no longer necessary. In the case of emergency calls, the terminal can immediately set up the SIP session by means of an SIP INVITE message. In all other cases, emergency call registration is required. This alternative method also covers the scenarios in which the method described before is applicable, but is more generally applicable.

If not every P-CSCF is capable of dealing with emergency calls, the P-CSCF can send back relevant information to the terminal, also in the response to the registration request by this terminal. The terminal must then take this information into consideration in the decision whether it must perform a special emergency call registration or not.

The invention describes methods by means of which a special IMS registration for emergency calls, and in the case of GPRS/UMTS access systems, the setting-up of a separate PDP context, can be dispensed with in most cases. Since setting-up of a PDP context and IMS registration are time-consuming procedures, this results in considerable time saving which is a significant requirement particularly in the case of emergency calls.

In particular, the invention can be used in cellular mobile radio networks but also in WLAN/WIMAX networks and fixed networks.

Further features and advantages of the invention are obtained from the further patent claims and the subsequent description of an exemplary embodiment by means of the drawing. The exemplary embodiment shows in figure 1 a flowchart which represents how a terminal, after successful IMS registration, can transmit an emergency call via a mobile radio access network without first having to perform a special emergency call registration in the IMS.

102006019719.4
2006P08190WOUS

- 5 -

Figure 1 shows some components "S-CSCF", "P-CSCF", "GGSN", "SGSN", "Radio Access Network" of a mobile radio network known per se to the expert from, e.g. specifications in www.etsi.org or www.3gpp.org.

A terminal (fig. 1, "terminal") registers in a mobile radio network and obtains a network identifier ("MCC1/MNC1") of the mobile radio network visited by it.

The terminal then sets up a PDP context to a GGSN of the mobile radio network and is assigned an IP address and a P-CSCF address for the communication with the P-CSCF.

Following this, the terminal registers with the P-CSCF in the IMS (with a "SIP REGISTER" message). From the P-CSCF, the terminal obtains the network identifier "MCC2/MNC2" of the network in which this P-CSCF is located (with a "SIP 200 OK" message).

If the terminal is to transmit an emergency call later, this is possible, e.g. in the following way:

a comparison of the network identifier "MCC1/MNC1" (stored in the terminal after its registration/authentication etc. in the mobile radio network visited by it) of the network visited by the terminal with the network identifier "MCC2/MNC2" of the network in which the P-CSCF is located, reveals that the P-CSCF is located in the network visited by the terminal.

For this reason, the terminal does not perform a special (separate/further) registration for the emergency call desired by it but immediately sets up the emergency call by means of a "SIP INVITE" message. This saves time.

102006019719.4
2006P08190WOUS

- 6 -

Patent claims

1. A method for setting up an emergency call connection from a terminal (fig. 1: "terminal") to an IMS via a network (fig. 1: "S-CSCF", "P-CSCF", "GGSN", "SGSN", Radio Access Network"...) visited by the terminal, wherein, if the terminal is already registered in the IMS, an IMS registration of the terminal in the IMS for this emergency call connection is dispensed with during the setting-up of an emergency call connection, if a comparison between a network identifier (fig. 1: "MCC1"/"MNC1") for the visited network, of which the terminal was notified when it registered in the visited network, and a network identifier of the home network of the terminal reveals a match between these network identifiers.
2. The method as claimed in claim 1, characterized in that a match of these network identifiers specifies that the terminal and/or mobile radio subscriber identity module located therein is located in its home network.
3. The method as claimed in claim 1, characterized in that, if the comparison reveals a match of the network identifiers, the terminal transmits the emergency call via an IMS registration which already exists.
4. The method as claimed in claim 1, characterized in that the comparison is made in the terminal.
5. The method as claimed in one of the preceding claims, characterized in that the network is a cellular mobile radio network or a WLAN/WIMAX network.
6. The method as claimed in one of the preceding claims, characterized in that the network is a fixed network.

102006019719.4
2006P08190WOUS

- 7 -

7. The method as claimed in one of the preceding claims, characterized in that the network identifier of the visited mobile radio network is conveyed to the terminal during the authentication of the terminal to the visited mobile radio network.

8. The method as claimed in one of the preceding claims, characterized in that a P-CSCF of a mobile radio network sends the network identifier (fig. 1: "MCC1"/"MNC1") of the network, in which it (P-CSCF) is located itself, to the terminal in a response ("SIP 200 OK") to an IMS registration request ("SIP REGISTER") of the terminal,

whereupon the terminal, when it finds that the network visited by it is not the home network, determines by means of a network identifier (fig. 1: "MCC2"/"MNC2") obtained from the P-CSCF during the registration, whether the P-CSCF is also located in the mobile radio network visited by the terminal, in which case, when an emergency call connection is set up, a special IMS registration of the terminal in the IMS is dispensed with for this emergency call connection and the terminal sets up an SIP session (fig. 1: SIP INVITE) for the emergency call connection, whereas otherwise, when an emergency call connection is set up, a special IMS registration of the terminal in the IMS is first effected for this emergency call connection before an SIP session (fig. 1: SIP INVITE) is set up for the emergency call connection.

9. The method as claimed in the preceding claim, characterized in that for the emergency call connection, an SIP session is set up by means of an "SIP INVITE" message.

10. The method as claimed in one of the preceding claims, characterized in that, if the P-CSCF is not capable of dealing with emergency calls, the P-CSCF sends back relevant information to the terminal in a response to a registration request by this terminal, and the terminal then takes this

102006019719.4
2006P08190WOUS

- 8 -

information into consideration in the decision whether it must perform a special emergency call registration or not.

11. A device for carrying out the method as claimed in one of the preceding claims.

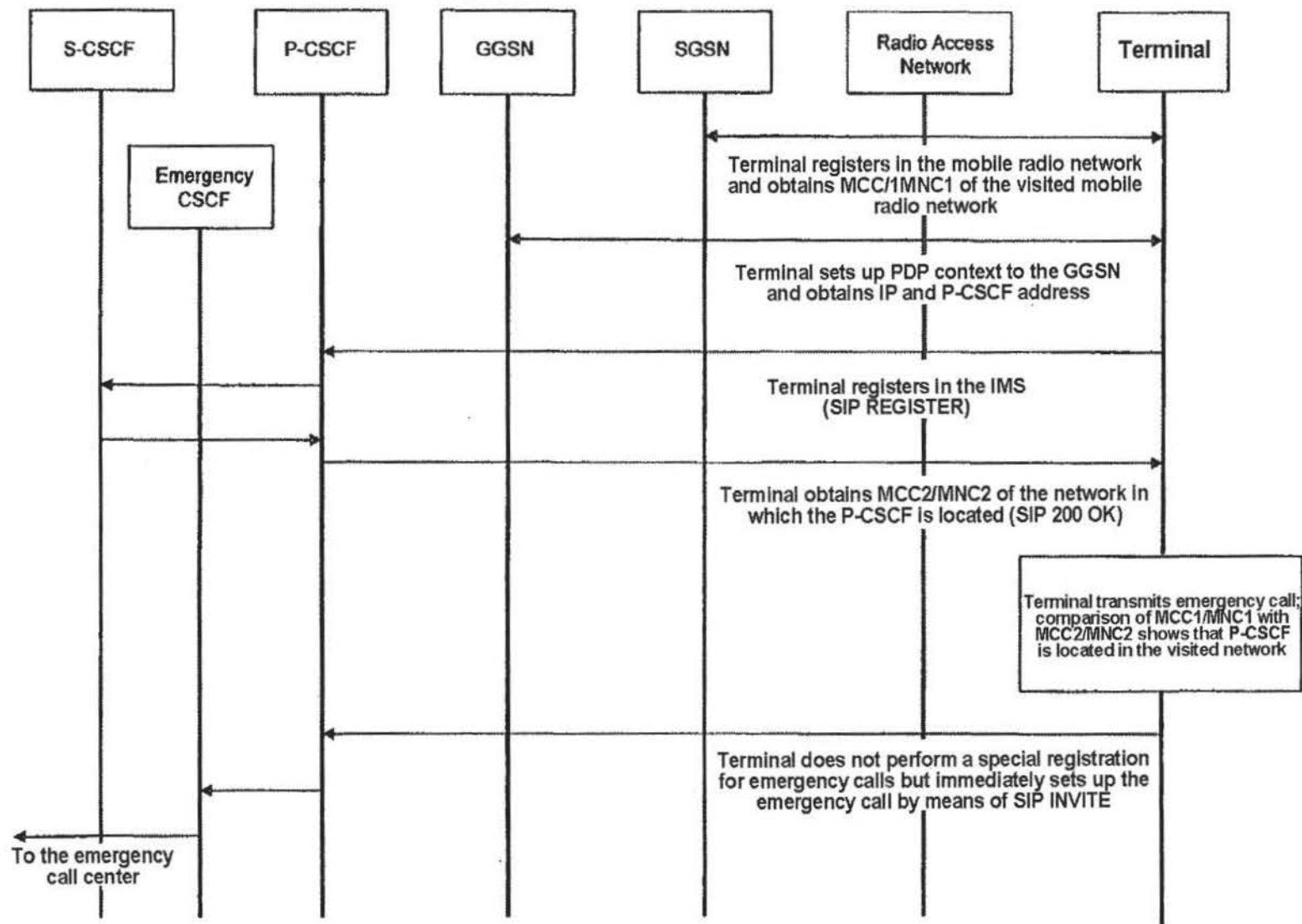
102006019719.4
2006P08190WOUS

Abstract

Simplified method for IMS registration in the event of emergency calls

IMS registration in the event of emergency calls is simplified by devices and a method for setting up an emergency call connection from a terminal (fig. 1: "terminal") to an IMS via a network (fig. 1: "S-CSCF", "P-CSCF", "GGSN", "SGSN", Radio Access Network"...) visited by the terminal, wherein, if the terminal is already registered in the IMS, an IMS registration of the terminal in the IMS for this emergency call connection is dispensed with during the setting-up of an emergency call connection, if a comparison between a network identifier (fig. 1: "MCC1"/"MNC1") for the visited network, of which the terminal was notified when it registered in the visited network, and a network identifier of the home network of the terminal reveals a match between these network identifiers.

(Fig. 1)



Simplified IMS registration in the event of IMS emergency calls

Fig.1

102006019719.4
2006P08190W0US

1/1